CLAIMS

1. (Previously Presented) In a firewall device having a plurality of communication interfaces, a firewall system comprising:

a) a firewall core connected to each of said plurality of communication; and

b) at least one inspection module coupled for communication to said firewall core, each said at least one inspection module configured to provide protocol inspection of data packets to said firewall core, said firewall core configured to receive data packets from said plurality of communication interfaces and communicate said packets to said at least one inspection module for inspection, said at least one inspection module is further configured to be installed during the operation of the firewall system.

2. (Previously Presented) The firewall system of claim 1, wherein said inspection module is installed into a memory space monitored by said firewall core.

3. (Previously Presented) The firewall system of claim 1, wherein said at least one inspection module further comprises a plurality of callback functions, said plurality of callback functions communicated to said firewall core and providing communication between said firewall core and said at least one inspection module.

4. (Previously Presented) The firewall system of claim 1, wherein said at least one inspection module is further configured to indicate to said firewall core for which data packets said at least one inspection module is configured to provide inspection.

5. (Original) The firewall system of claim 1, wherein said data packets intercepted by said firewall core further includes session information comprising address and port data, said firewall core further configured to map said session information to corresponding inspection modules.

6. (Previously Presented) In a firewall device having a plurality of communication interfaces, a firewall core configured to be coupled to at least one inspection module, said firewall core comprising:

a) a communication unit operatively coupled to the communication interfaces;

b) a set of callback functions, retrieved from said inspection module, each said function providing communication between said firewall core and said inspection module: and

c) wherein said firewall core being configured to monitor a memory to determine when a new inspection module is loaded into said memory.

7. (Original) The firewall core of claim 6, wherein said communication unit is further configured to intercept network data communicated via said network interfaces.

8. (Original) The firewall core of claim 7, further comprising a session mapping unit, said data packets intercepted by said firewall core further including session information comprising address and port data, said firewall core further configured to map said session information to corresponding inspection modules into a session mapping and store said session mapping into said session mapping unit.

9. (Original) The firewall core of claim 6, wherein said communication unit is further configured to communicate packets between said communication interfaces and said inspection module for inspection.

10. (Previously Presented) In a firewall device having a plurality of communication interfaces and a firewall core coupled to the communication interfaces, an inspection module configured to couple with the firewall core, said inspection module comprising:

a) an inspection unit configured to inspect and authorize data packets;

b) a function table having a set of callback functions each said function providing communication between said firewall core and said inspection module; and

c) wherein said inspection module is loaded into a memory monitored by said firewall core during operation of said firewall device.

11. (Original) The inspection module of claim 10, where in said inspection unit is further configured to be installed during the operation of the firewall core.

12. (Cancelled)

13. (Original) The firewall system of claim 1, wherein said inspection module is further configured to indicate to said firewall core for which data packets said inspection module is configured to provide inspection.

14. (Original) The inspection module of claim 10, where in said inspection unit is further configured to receive and inspect packets communicated from the firewall core.

15. (Previously Presented) In a firewall device having a firewall system including a firewall core, a method for adding protocol knowledge to the firewall system during runtime comprising:

a) loading an inspection module into a memory monitored by said firewall core during operation of said firewall system wherein said inspection module comprises new protocol inspection knowledge and a function table having a set of callback functions;

b) notifying the firewall core of said inspection module; and

c) communicating said set of callback functions to said firewall core.

16. (Original) The method of claim 15, further comprising enabling said inspection module, prior to communicating said set of callback function to said firewall core.

17. (Original) The method of claim 15 further comprising inspecting of packets by said inspection module, said packets communicated from the firewall core to said inspection module.

18. (Cancelled)

19. (Original) The method of claim 15 wherein said notifying the firewall core comprises transmitting a signal to the firewall core to indicate the installation of said inspection module.

20. (Original) The method of claim 15, further comprising indicating by said inspection module for which data packets said inspection module provides inspection.

21. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for adding protocol knowledge to a firewall system during runtime comprising, said firewall system including a firewall core, said method comprising:

a) loading an inspection module into a memory monitored by said firewall core during operation of said firewall system wherein said inspection module comprises new protocol inspection knowledge and a function table having a set of callback functions;

b) notifying the firewall core of said inspection module; and

c) communicating said set of callback functions to said firewall core.

22. (Original) The program storage device of claim 21, said method further comprising enabling said inspection module, prior to communicating said set of callback function to said firewall core.

23. (Original) The program storage device of claim 21, said method further comprising inspecting of packets by said inspection module, said packets communicated from the firewall core to said inspection module.

24. (Cancelled)

25. (Original) The program storage device of claim 21, wherein said notifying the firewall core comprises transmitting a signal to the firewall core to indicate the loading of said inspection module.

26. (Original) The program storage device of claim 21, said method further comprising indicating by said inspection module for which data packets said inspection module provides inspection.